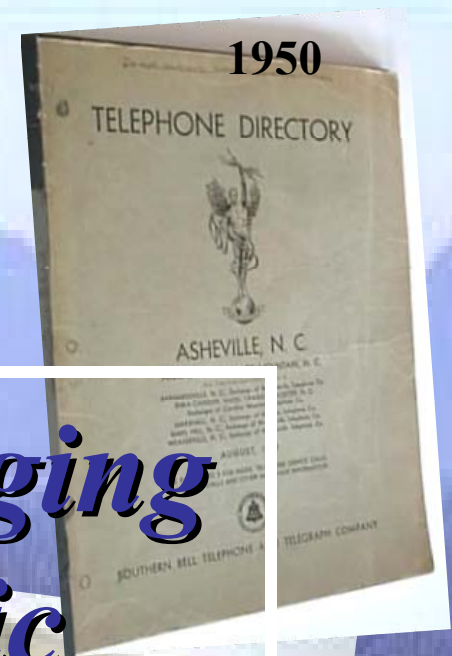


2006 Chief's Review

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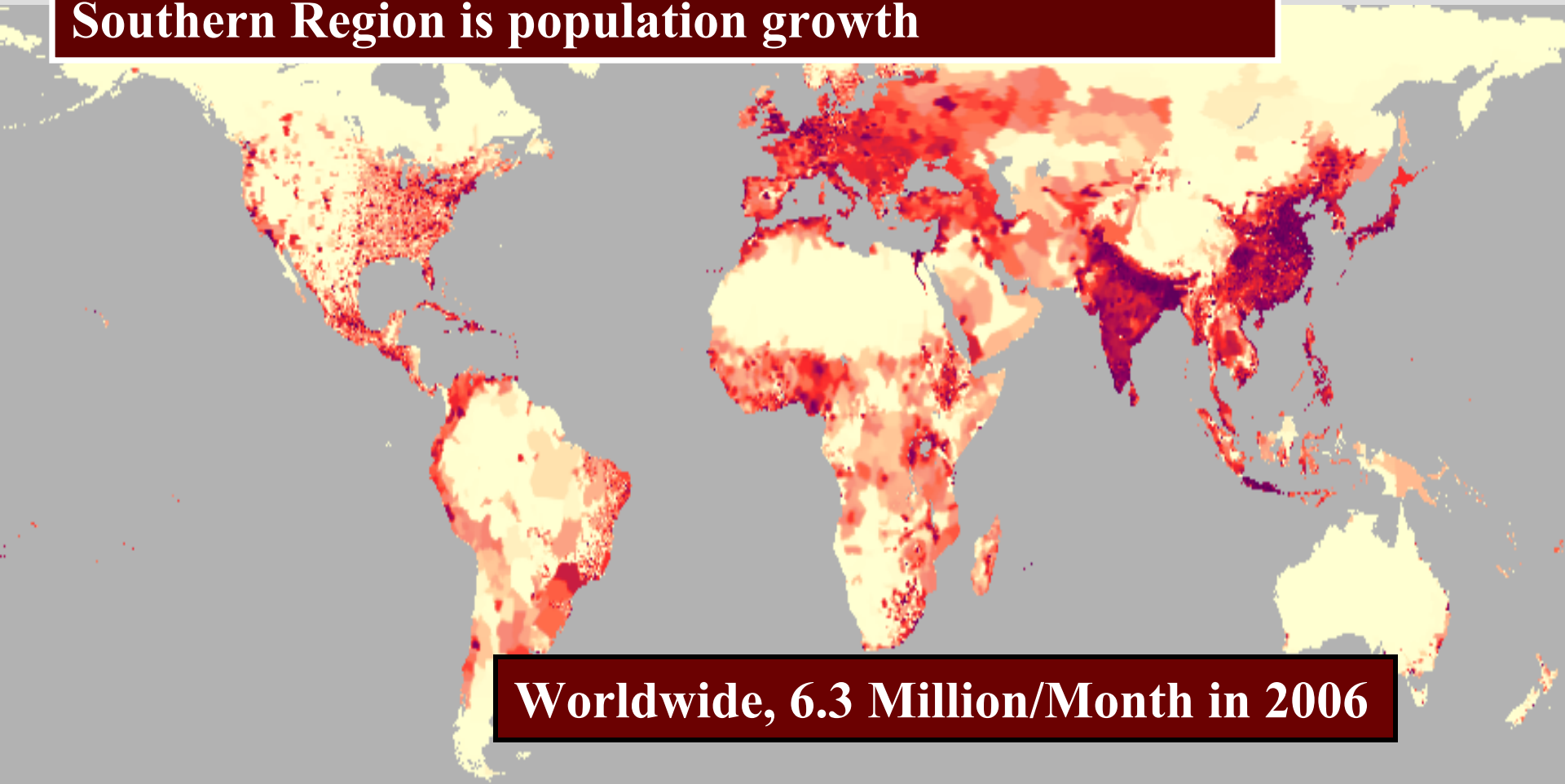
Changing Faces, Changing Places: Demographic Trends of the South



Ken Cordell, Southern Research Station, FS R&D, Co-authors Carter Betz, Shela Mou, Gary Green (UGA) and Mike Bowker---Southern Research Station

<http://www.OLDtelephonebooks.com/phusncab.html>

The modern-day context of the United States and its Southern Region is population growth



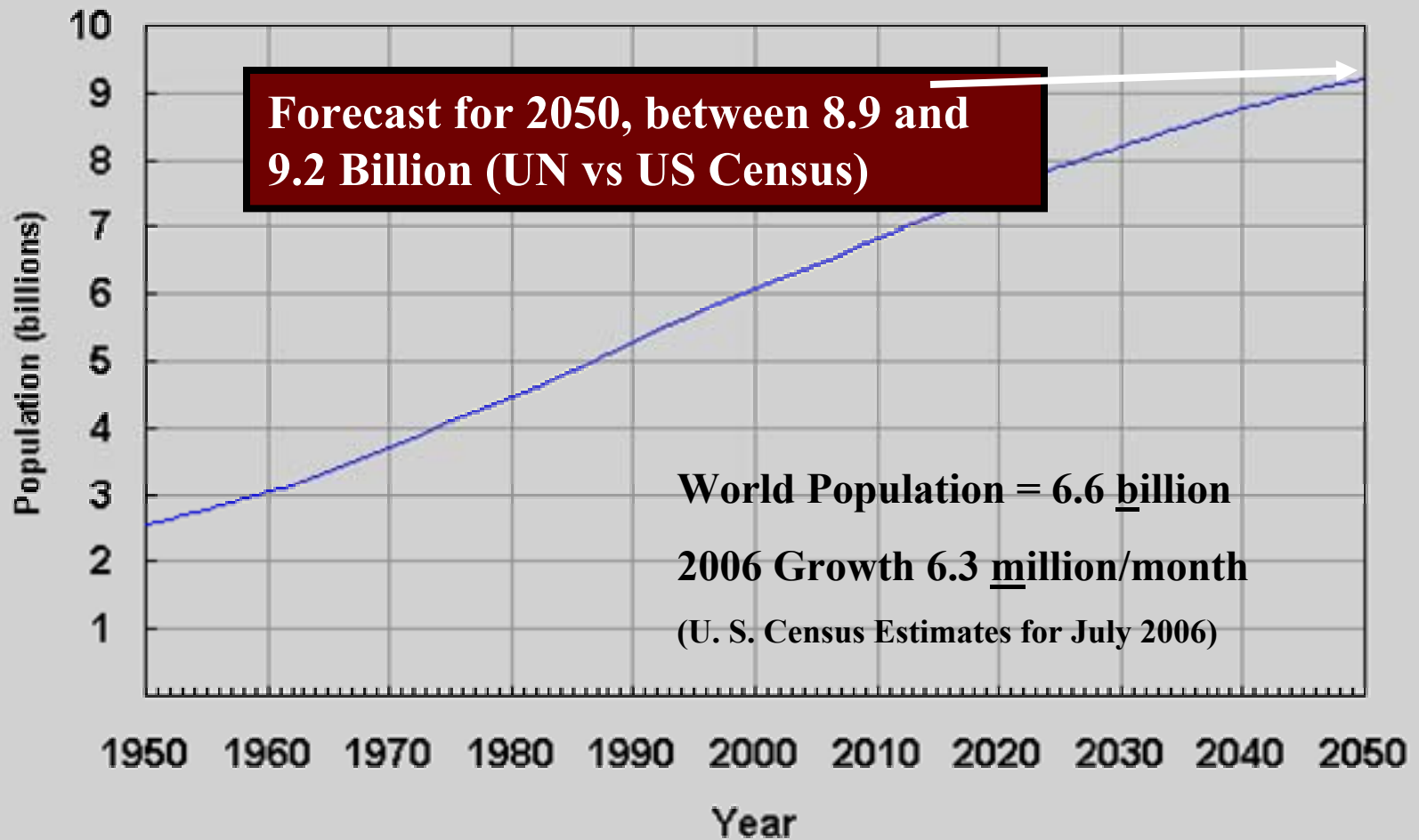
Worldwide, 6.3 Million/Month in 2006

Population densities (per square km)



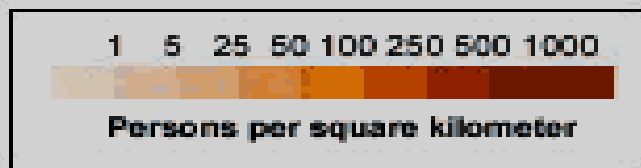
<http://sedac.ciesin.columbia.edu/gpw/>

World Population: 1950-2050



Source: U.S. Census Bureau, International Data Base, April 2005 version.

**North America is very much a part
of the World's population story**



POPULATION STATISTICS FOR THE U.S. (2006)

- Population growth rate per year
0.91% (about 3 million per year)

- Birth rate
14.14 births/1,000 population

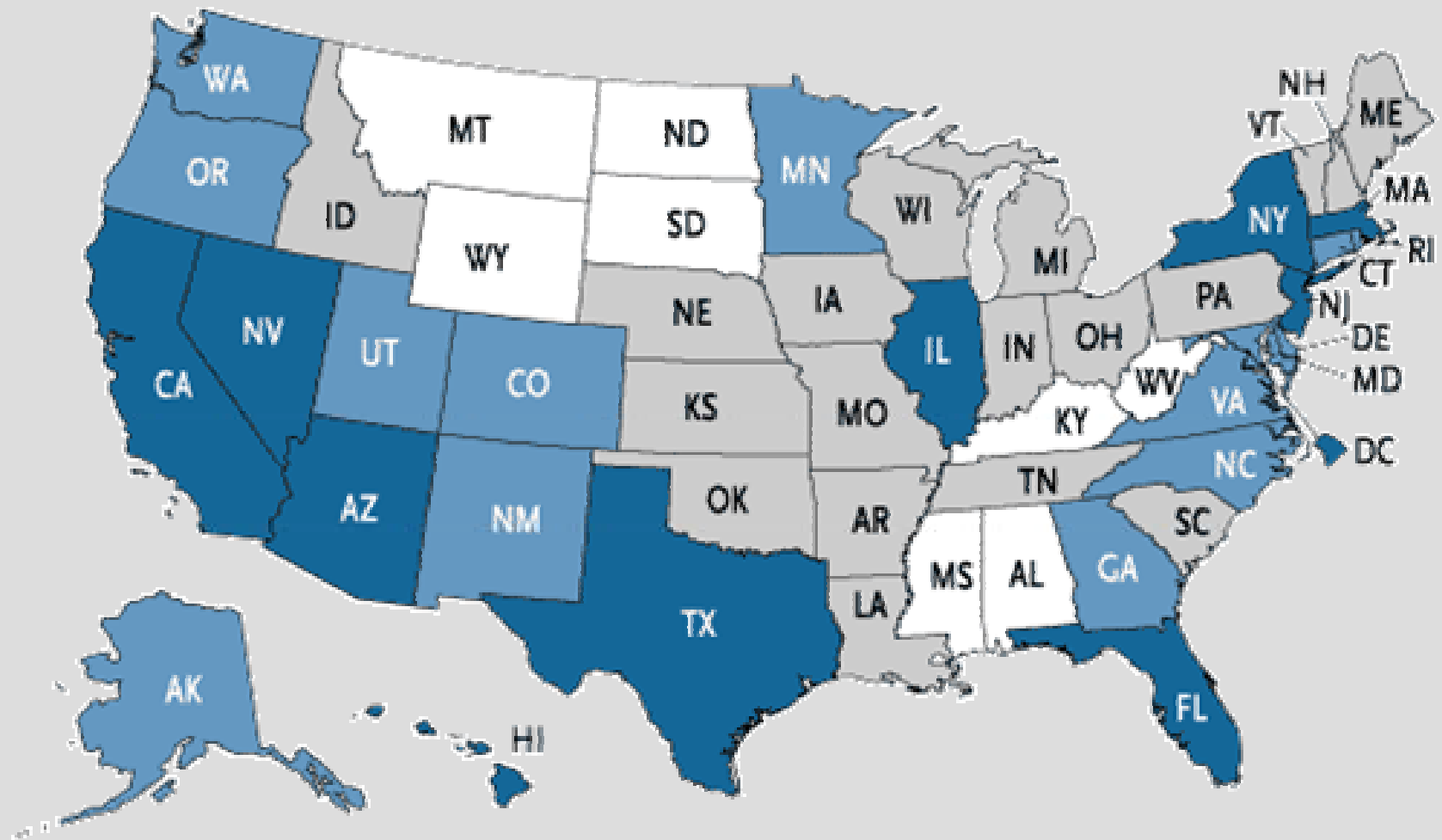
- Death rate
8.26 deaths/1,000 population

- Immigration
3.18 migrant(s)/1,000

$$14.14 - 8.26 + 3.18 = 9.06/1,000$$

- Life expectancy at birth
total population: 77.8 years
male: 75.0 years
female: 80.8 years (2006 est.)

Percent Foreign-Born by State, 2003

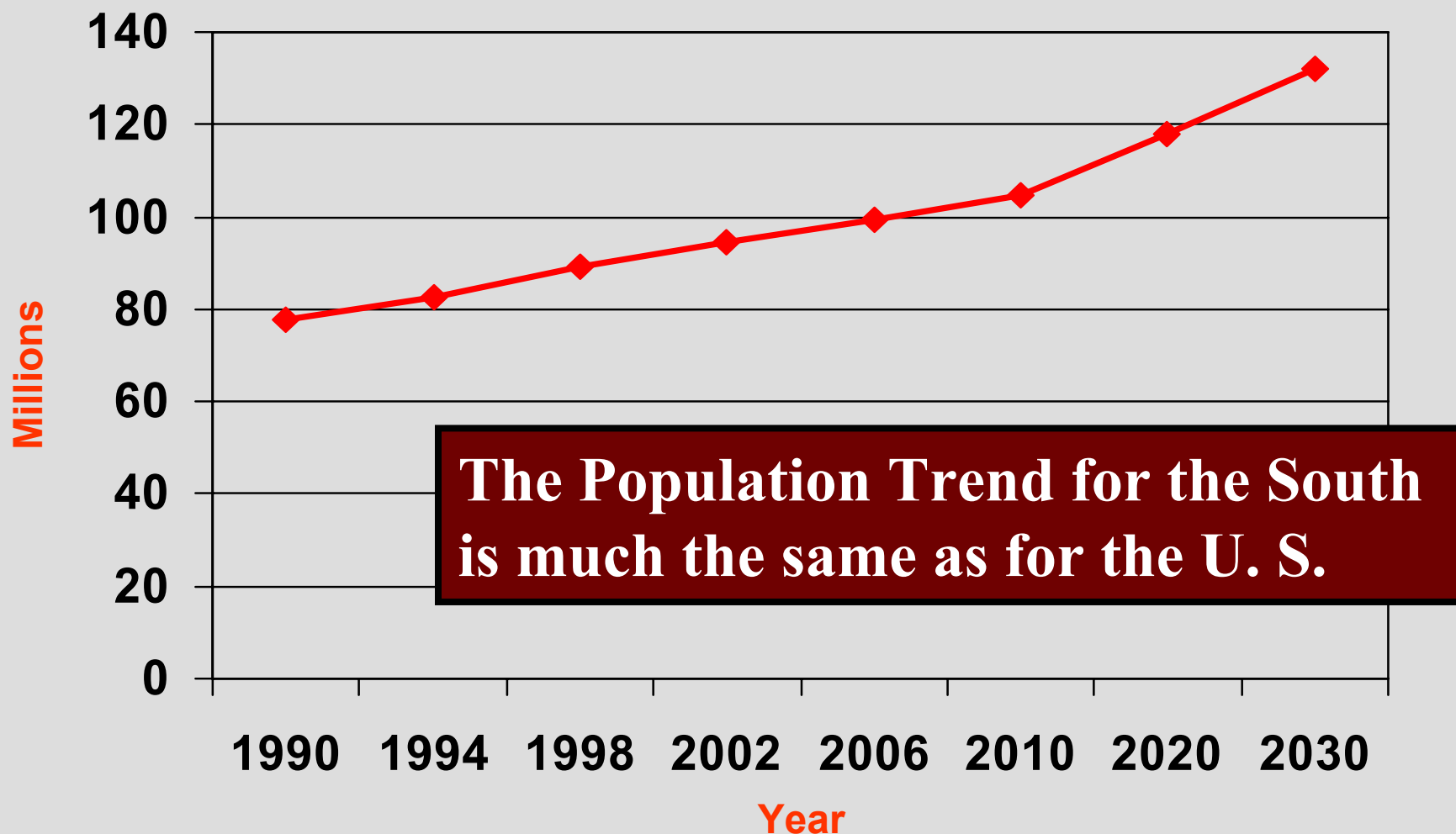


**Immigration adds over
3 million per year**

Percent foreign-born, 2003



Trend in Total Population for the South



Source: United States Bureau of Census and Woods-Poole Data Projections

Southern States – Population for 1990 & 2006 and Percentage Change

STATE	1990	2006	Percentage Change
GEORGIA	6512.602	9035.052	38.73
FLORIDA	13033.307	17894.089	37.30
TEXAS	17056.755	23126.538	35.59
NORTH CAROLINA	6664.016	8713.156	30.75
TENNESSEE	4894.492	6037.011	23.34
VIRGINIA	6216.884	7660.016	23.21
SOUTH CAROLINA	3501.155	4287.559	22.46
ARKANSAS	2356.586	2811.162	19.29
MISSISSIPPI	2578.897	2947.403	14.29
OKLAHOMA	3148.825	3592.128	14.08
KENTUCKY	3694.048	4203.696	13.80
ALABAMA	4050.055	4599.37	13.56
LOUISIANA	4221.532	4562.527	8.08

Source: Woods & Poole CEDDs Series

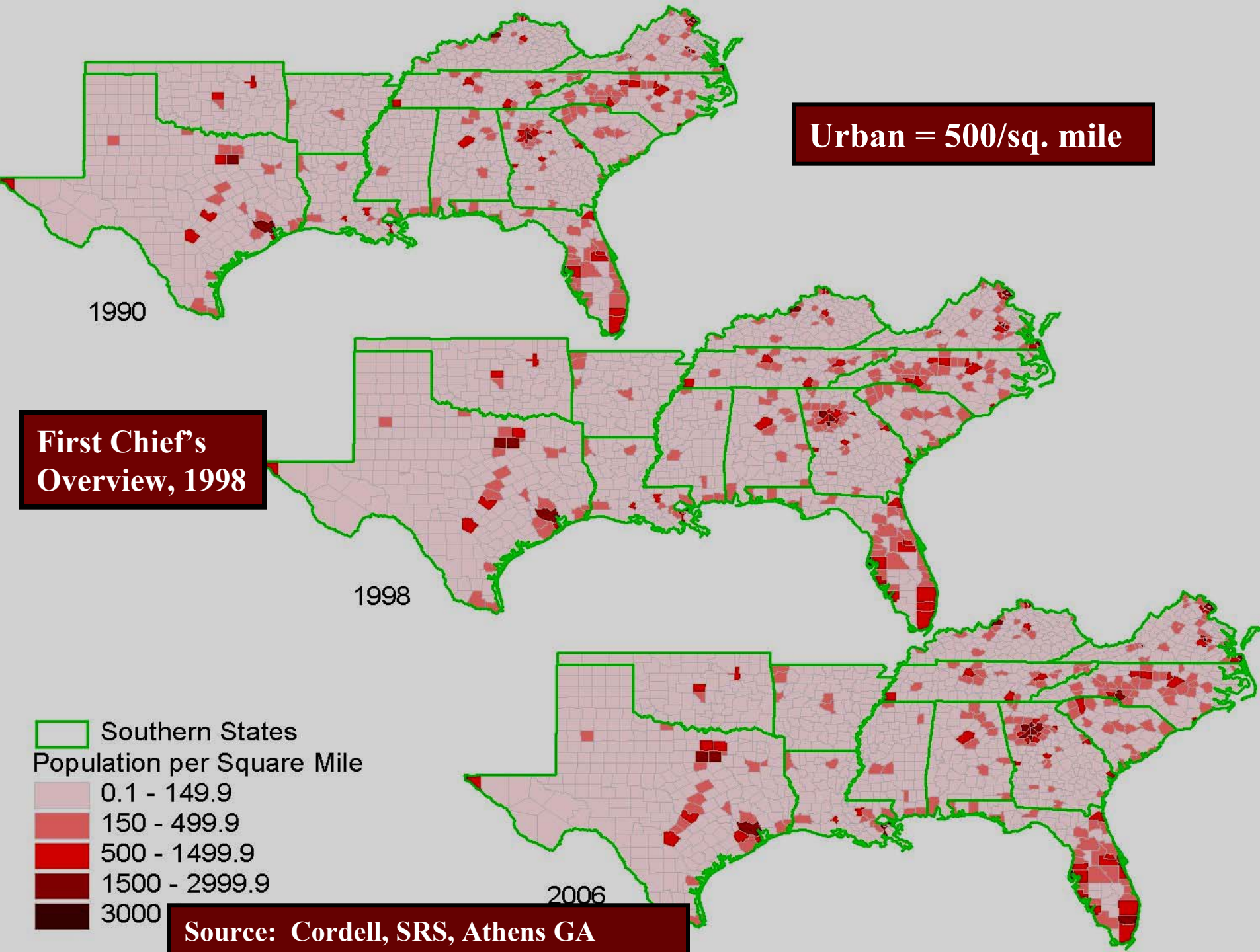
May not reflect
Katrina impact



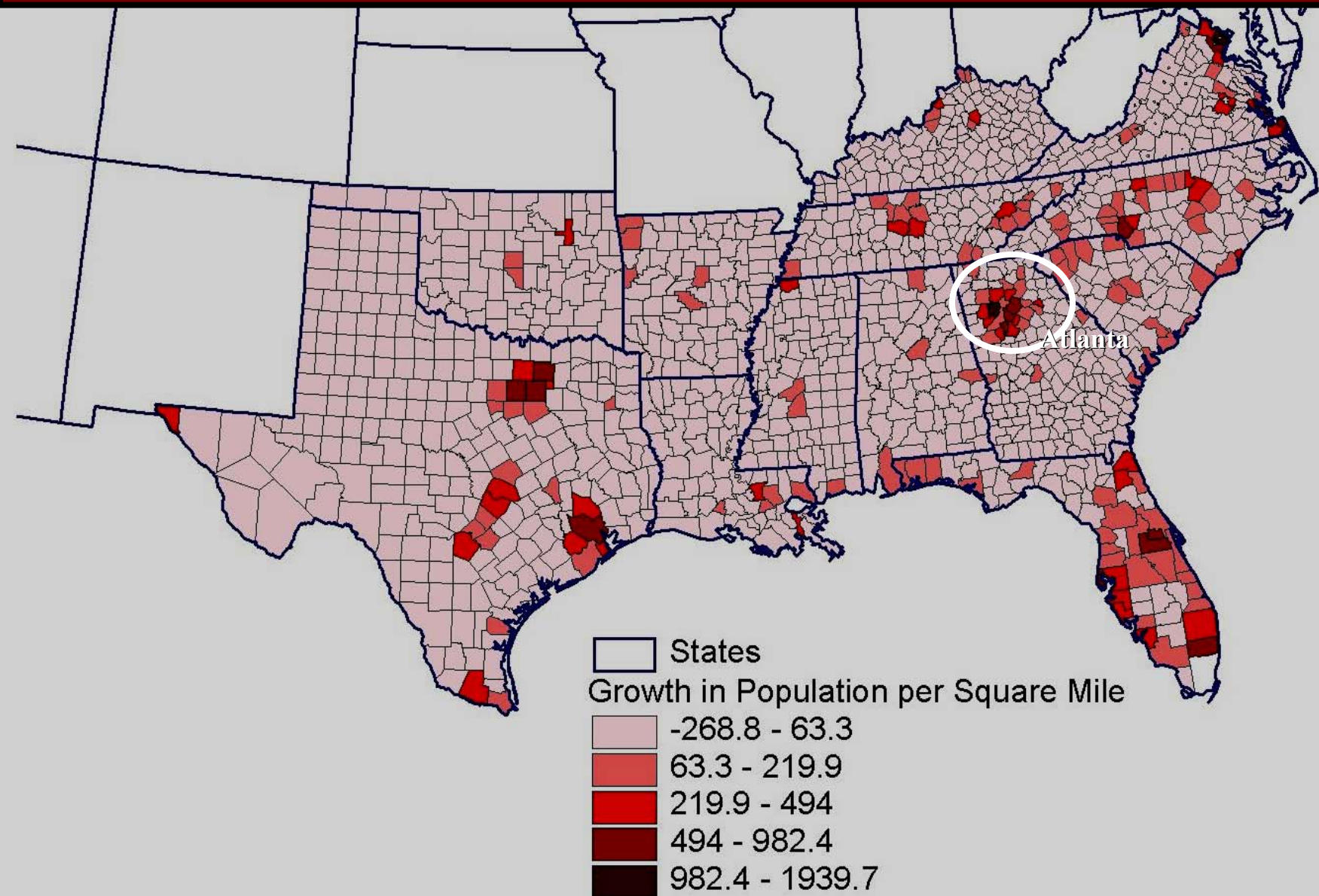
Southern Metro and Non-Metro population change for 1990-98 and 1998-2006 (Thousands)

	1990 Total Population	1998 Total Population	Percent Change 1990- 1998	2006 Total Population	Percent Change 1998- 2006
Total population	77929.15	89373.70	14.7	99469.71	11.3
Non-metro counties	20629.94	22696.33	10.0	23932.79	5.4
Metro counties	57299.21	66677.36	16.4	75536.92	13.3

Numbers are still growing, but rate is declining somewhat

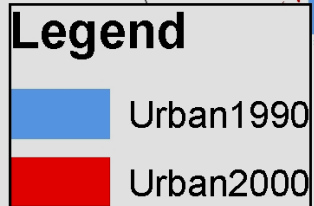


2006 and 2030 Projections of population density (growth in numbers per square mile, density, not percentage change)





Atlanta, GA



10 Years, Urban = 500 per sq. mile

Source: Nowak 2005

Trend in Southern Population by age group, 1990, 1998, & 2006

Age Group	1990 Percent Population	1998 Percent Population	2006 Percent Population
<10	14.8	14.4	13.9
10-19	14.5	14.5	13.9
20-29	16.2	14.1	14.1
30-49	29.0	30.3	28.5
50-64	13.0	14.3	17.1
65+	12.6	12.5	12.4

Falling
Rising

Percent of Population in the South by Age and State, 2006

State	Persons below 35	Persons above 65
Florida	43.8	17.0
Arkansas	47.6	13.9
Alabama	47.3	13.2
Oklahoma	48.7	13.1
South Carolina	47.7	12.7
Tennessee	46.9	12.6
Kentucky	47.0	12.5
Mississippi	50.2	12.1
North Carolina	48.5	12.1
Louisiana	49.9	11.7
Virginia	47.3	11.5
Texas	52.8	9.8
Georgia	51.1	9.6

**The number of seniors
(65+) is projected to
continue to rise
through 2030
(thousands/county)**

1990

2010

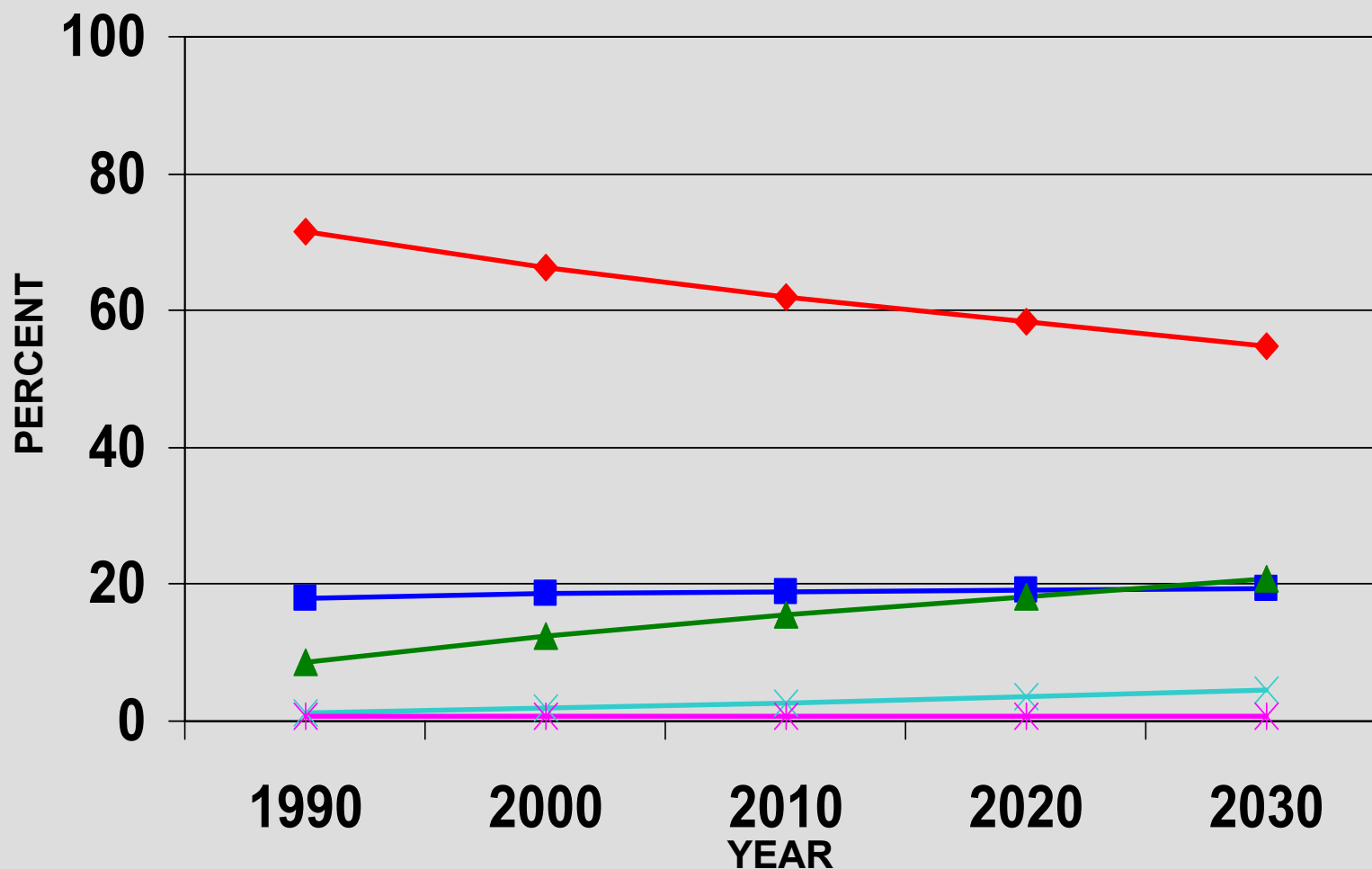
2030



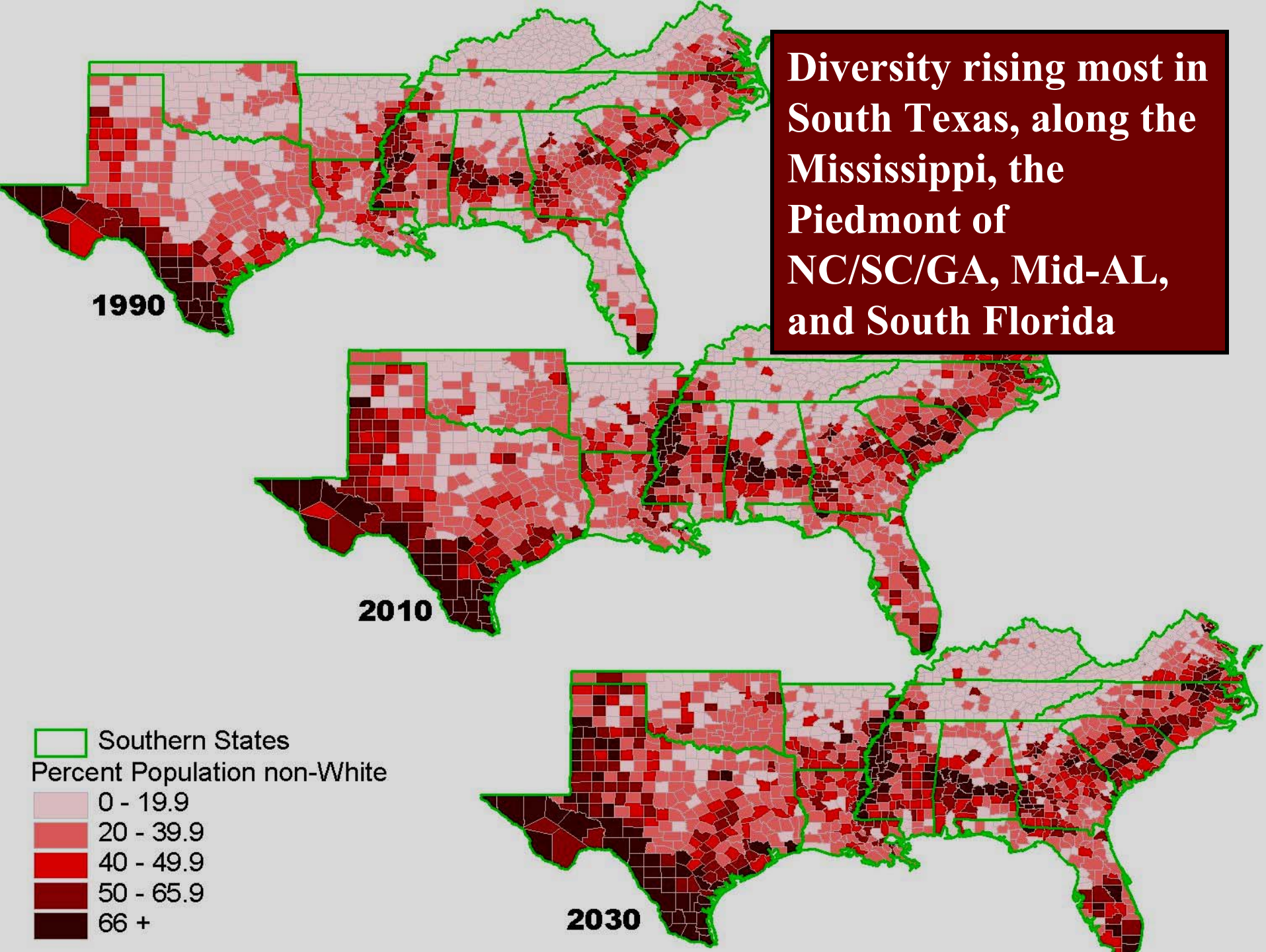
Percentage of Population by State and Race

State	Black	Hispanic	Asian
Texas	11.2	35.6	3.4
Florida	15.7	19.9	2.2
Georgia	28.9	6.7	2.8
Oklahoma	8.3	6.4	2.0
North Carolina	21.8	6.3	1.9
Virginia	20.1	5.9	4.8
Arkansas	16.1	4.2	1.1
South Carolina	30.2	3.1	1.2
Tennessee	17.0	2.9	1.4
Louisiana	33.4	2.7	1.6
Alabama	26.8	2.3	1.0
Kentucky	7.7	2.0	1.1
Mississippi	37.2	1.6	0.9

Racial and Ethnic Diversity will rise in the future



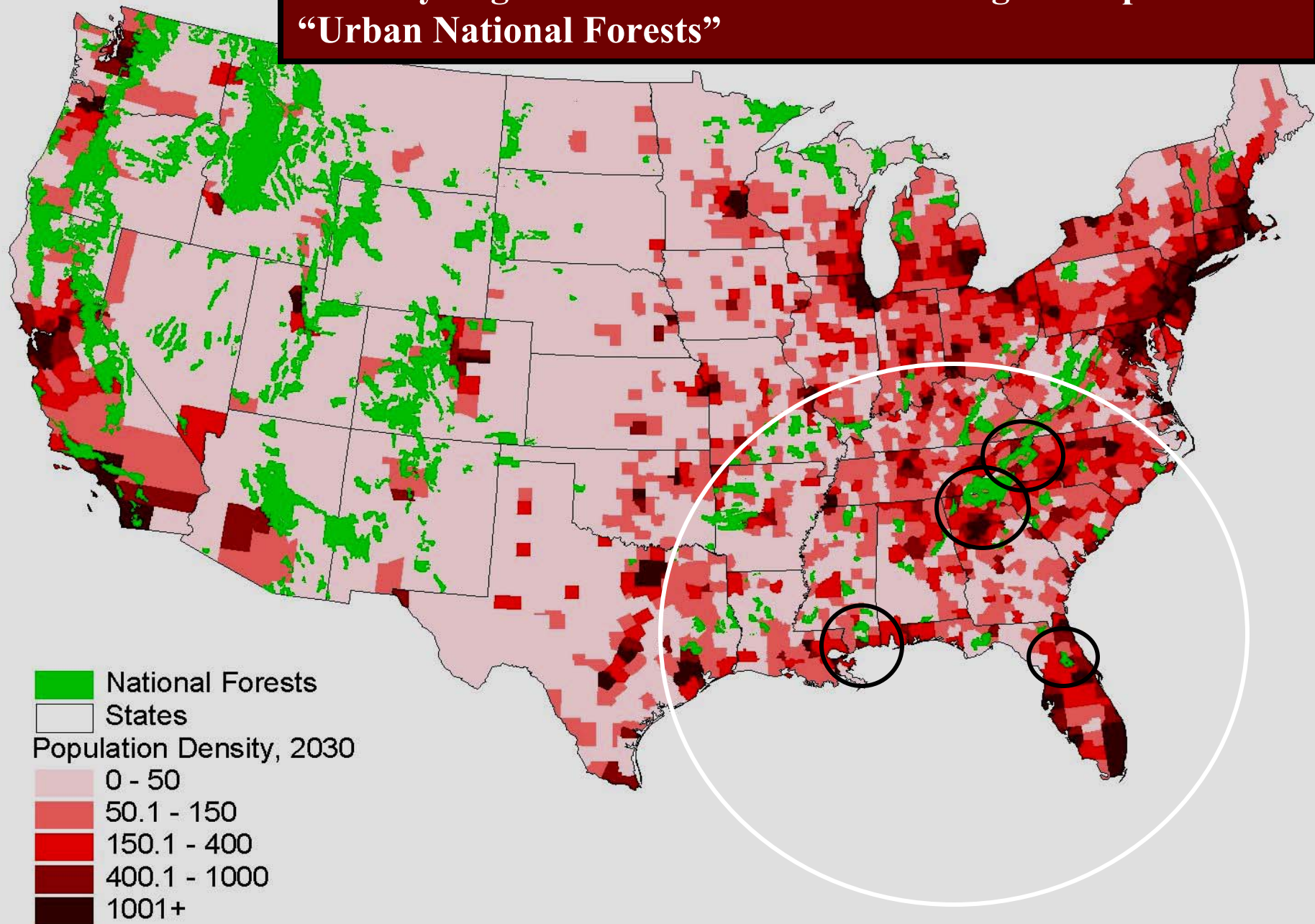
—◆— White —■— Black —▲— Hispanic —x— Asian —*— American Indian



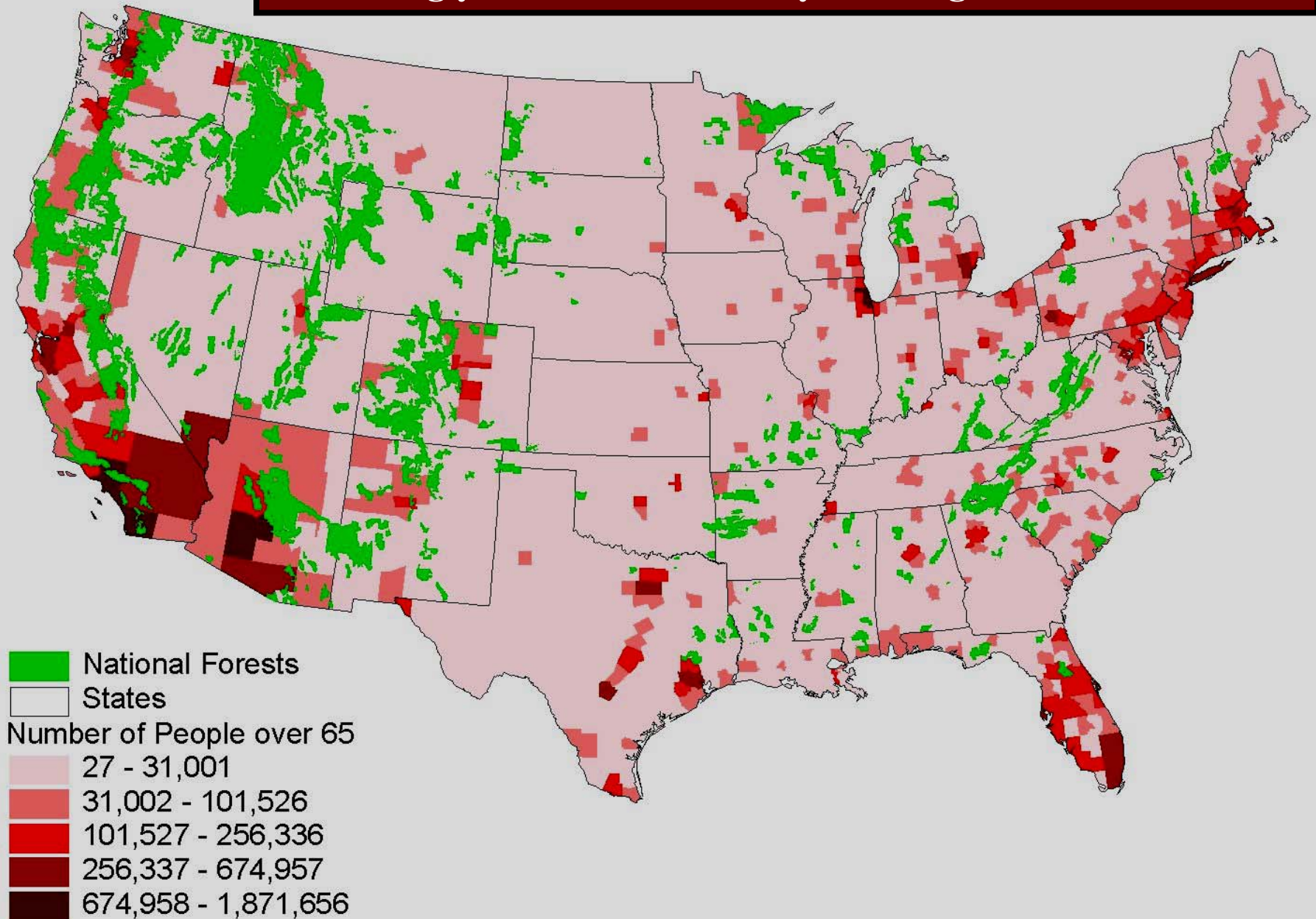
Percent of Population by Type of Employment by Year

Employment	1990 Percent	2010 Percent	2030 Percent
Farm	2.8	1.9	1.5
Agricultural Services, Other	1.1	1.4	1.4
Mining	1.4	0.7	0.7
Construction	5.8	6.2	6.2
Manufacturing	14.0	8.9	7.3
Transportation, Communications, Public Utilities	4.9	5.2	5.4
Wholesale Trade	4.7	4.3	4.1
Retail Trade	16.8	16.2	15.5
Finance, Insurance, Real Estate	6.8	7.9	7.4
Services	25.4	32.8	36.7
Federal Civilian Government	2.4	1.5	1.3
Federal Military Government	2.7	1.5	1.3
State & Local Government	11.4	11.4	11.4

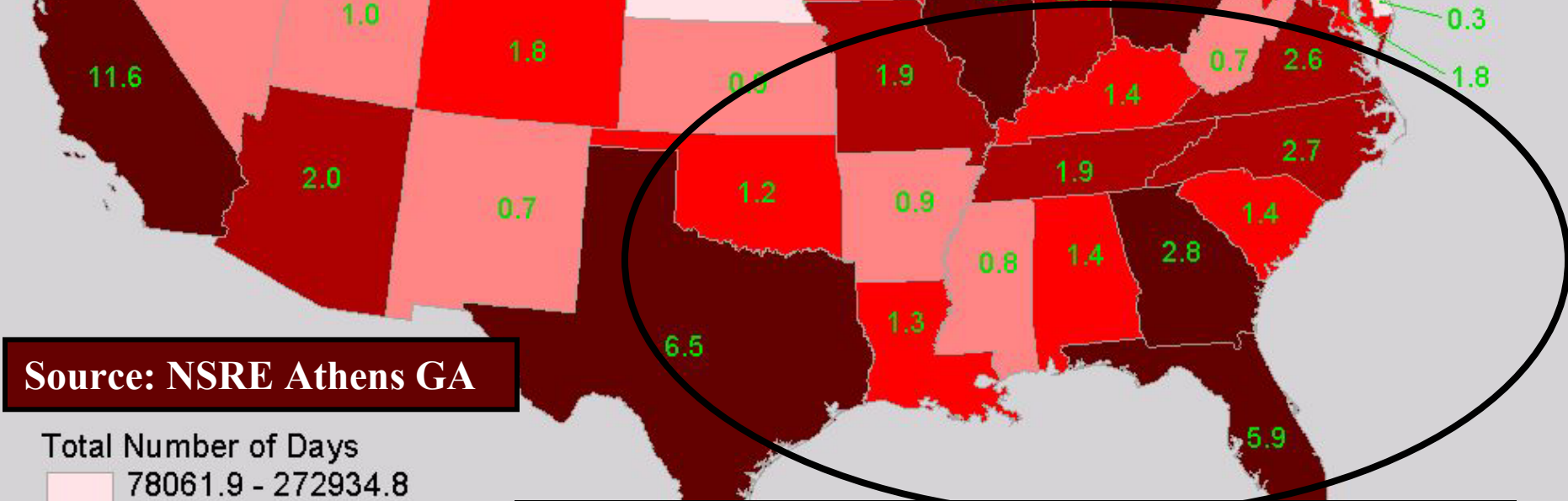
**Amenity migration has added new meaning to the phrase
“Urban National Forests”**



As the senior population expands, National Forests are increasingly the natural amenity drawing them as retirees



Total Number of Days of Recreation Participation Across Nature-based Activities with Percent of Market Share



Source: NSRE Athens GA

Total Number of Days

$$\square \quad 78061.9 - 272934.8$$

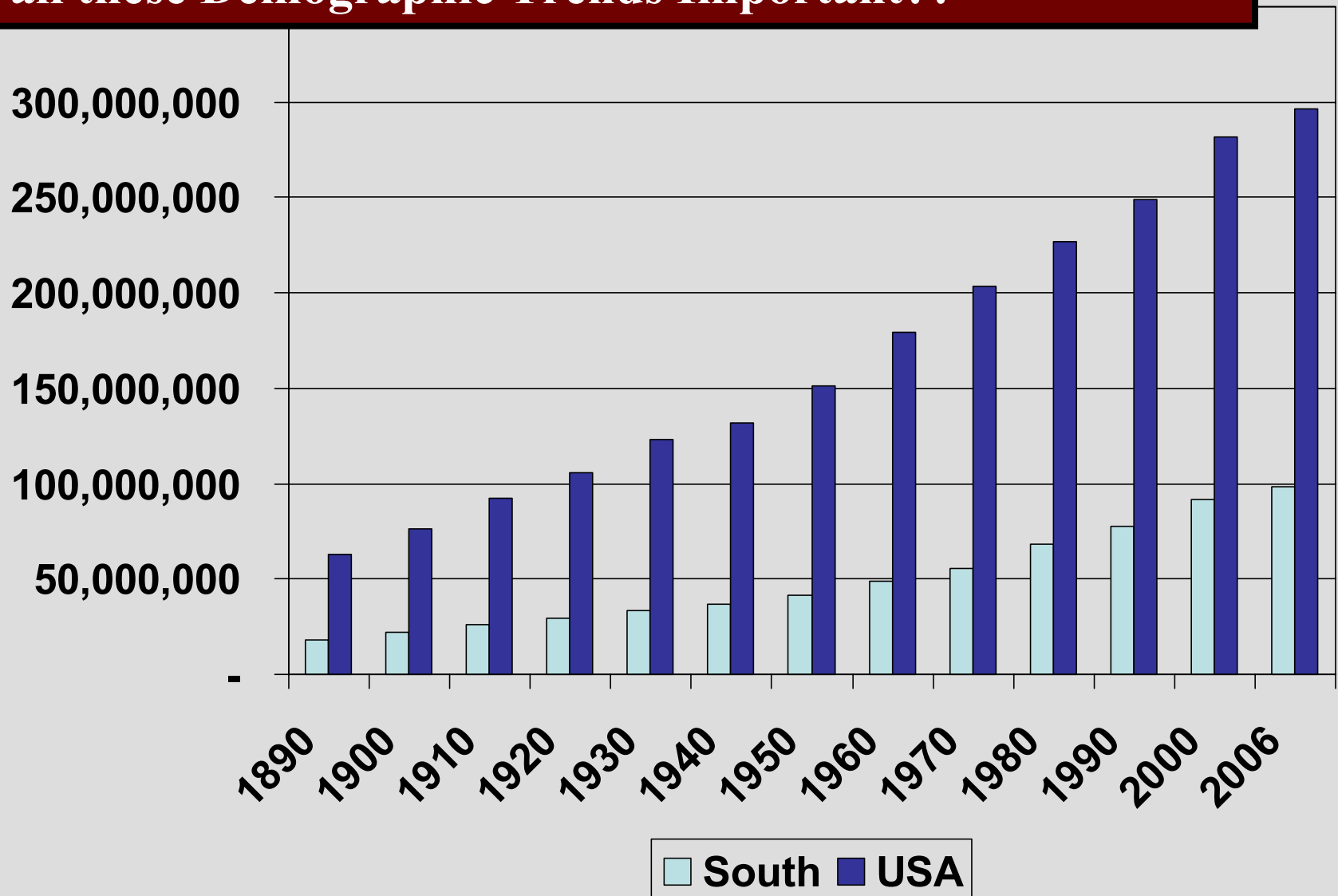
272934.8 - 451349.6

451349.6 - 862826.8

862826.8 - 1280010.3

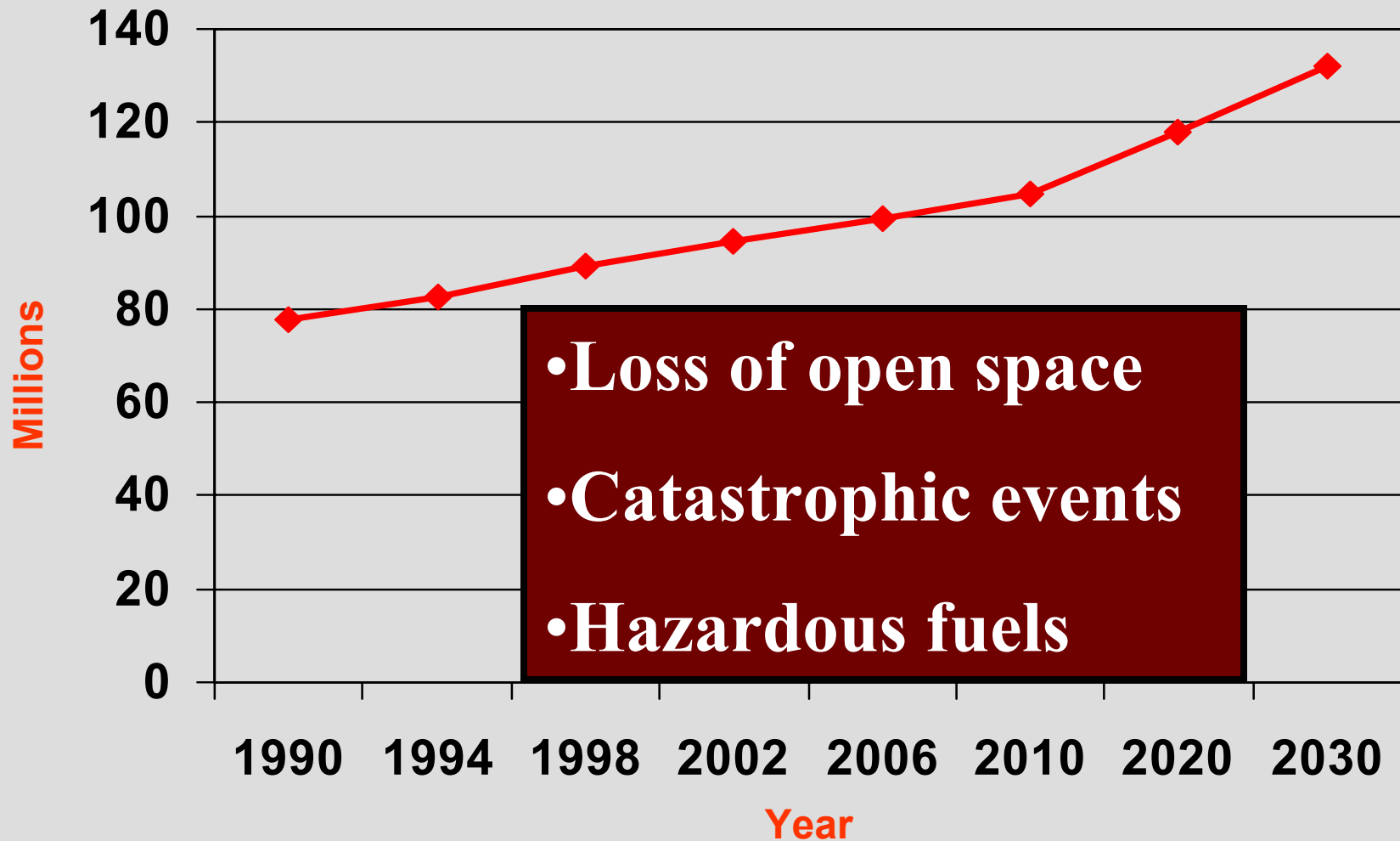
The South's population is 30.8 percent of total U.S. recreation demand (days of)

Historical Population Trend for the South-----Why are all these Demographic Trends Important??



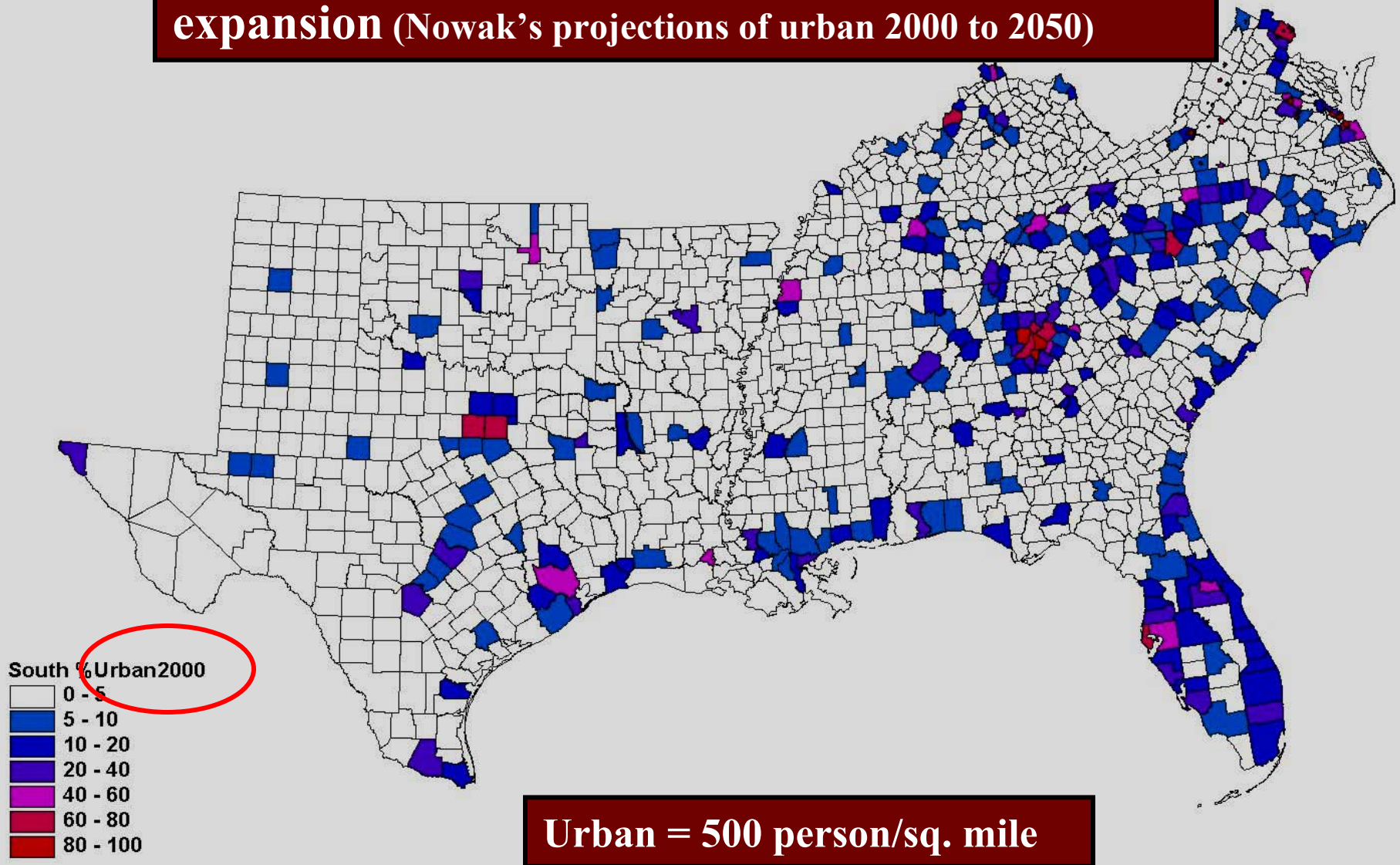
Updated Source: So. Forest Resources Assessment

There will be forest management challenges brought about by growing and diversifying population in the South

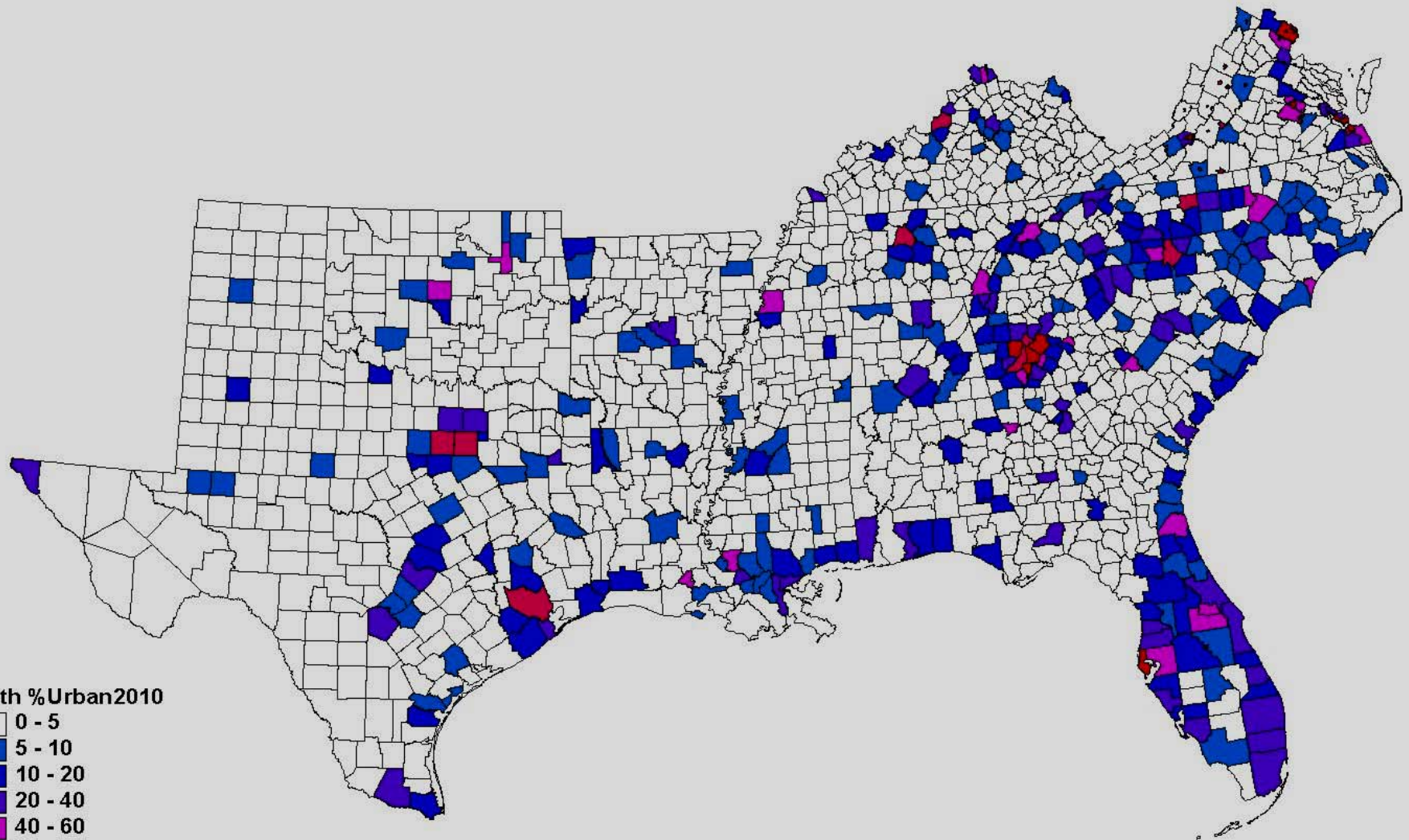


Source: United States Bureau of Census and Woods-Poole Data Projections

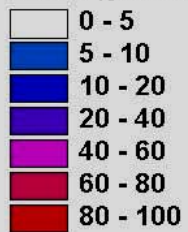
1. Population growth is driving rapid urban expansion (Nowak's projections of urban 2000 to 2050)



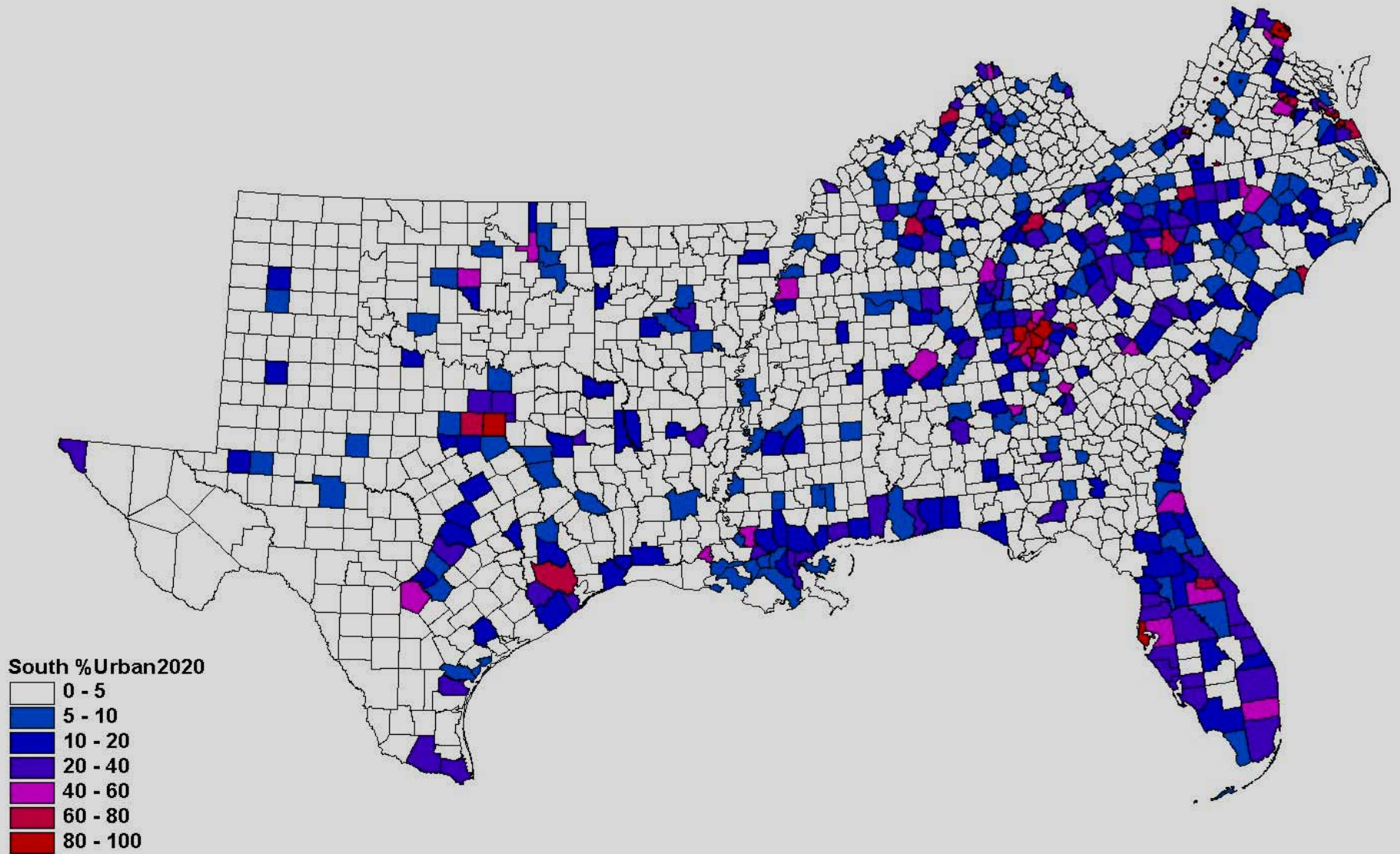
Percent Urban (2010)



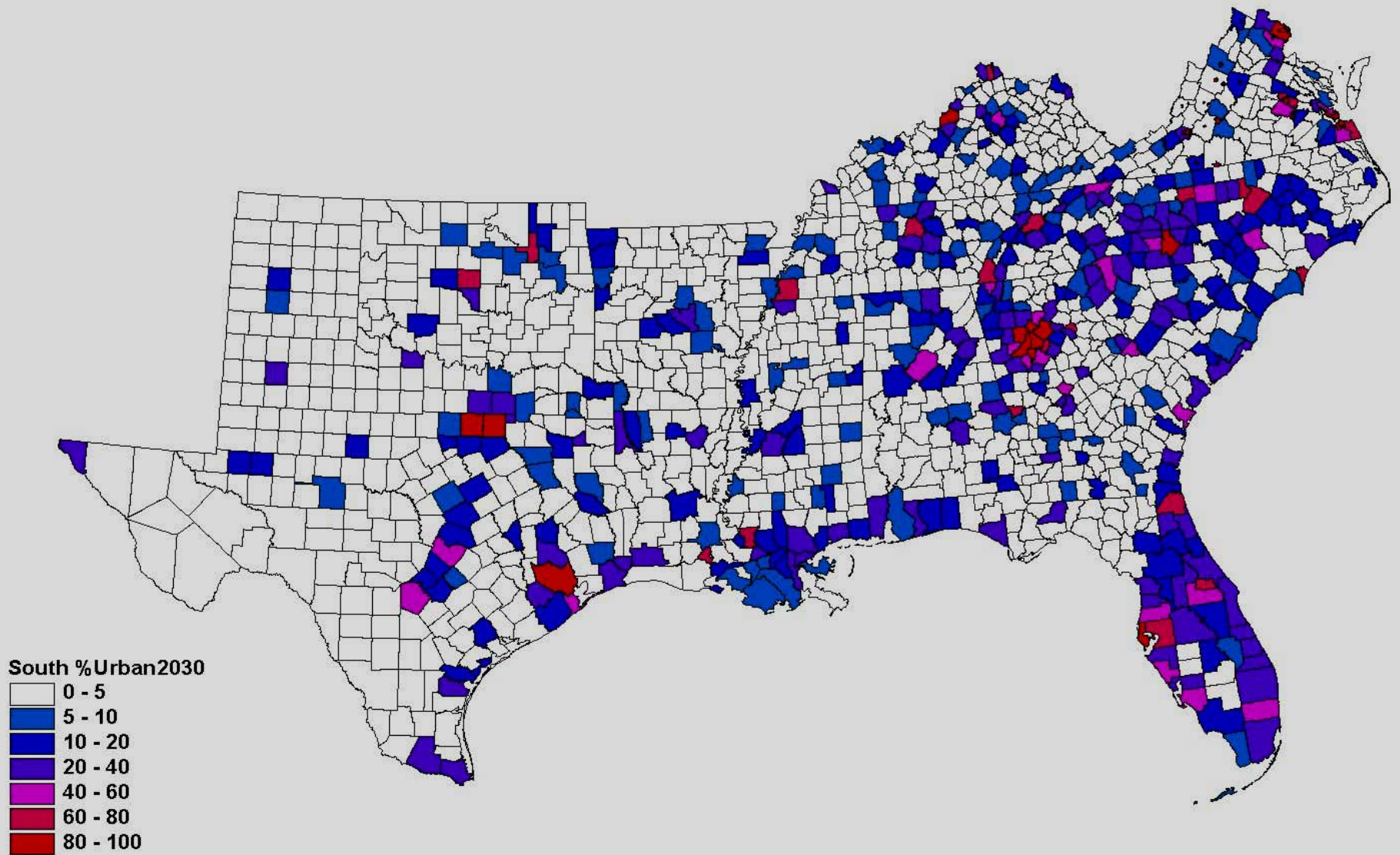
South %Urban2010



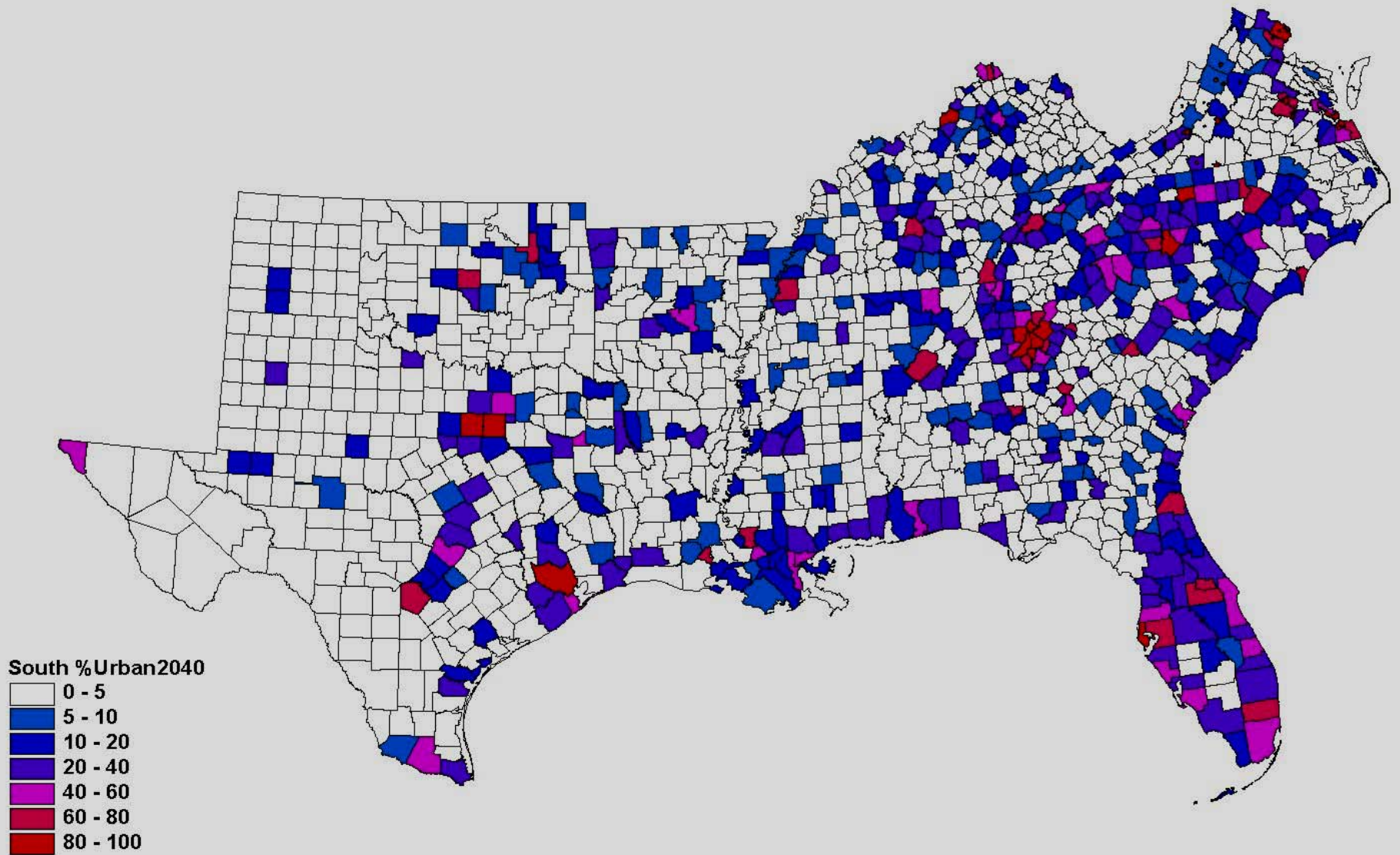
Percent Urban (2020)



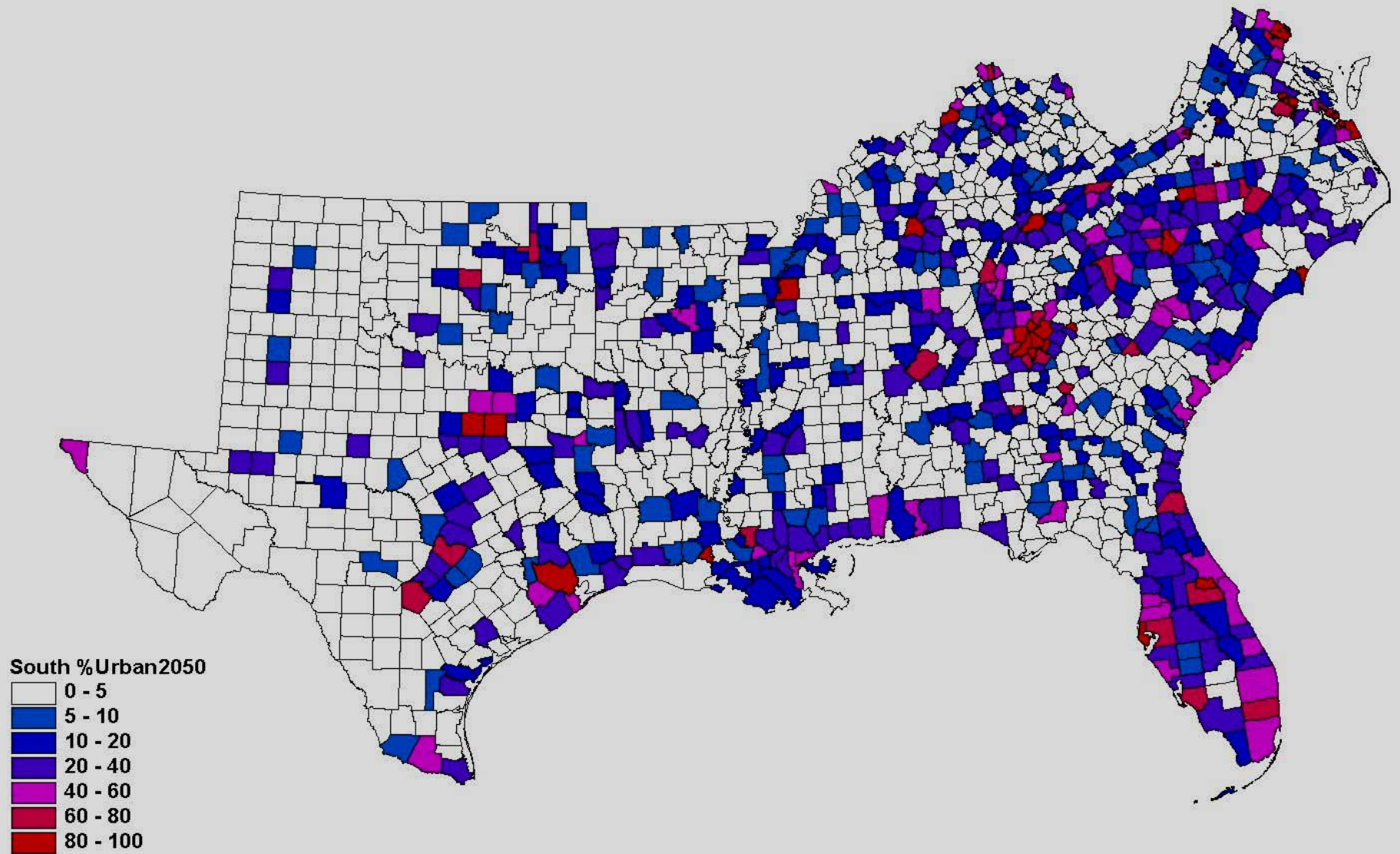
Percent Urban (2030)



Percent Urban (2040)



Percent Urban (2050)



2. A lot more people live in the interface area, which we define as developing rural (Source, Athens Research Group)

Description of Area	U.S. (n=4988)	North (n=2098)	South (n=1342)	Rocky Mtns. (n=932)	Pacific Coast (n=616)
	(Percent of Population)				
Established downtown area	9.2	9.7	8.6	8.6	9.6
Established older residential area near downtown	24.9	26.5	20.7	22.0	31.2
Established newer residential area	14.5	14.3	13.9	17.9	12.7
Newly developing area where building is active	9.9	7.6	11.8	11.5	11.0
New residential and preexisting rural house and farms	16.9	17.9	17.6	15.3	14.7
Rural area with little new development	21.1	20.0	24.1	21.4	18.3
Don't know	More People living in the woods				3.3
Total	100.0	100.0	100.0	100.0	100.00



Blue = lowest %
Red = highest %

Race

NATIONAL FOREST VALUES of General Public	White, NH	Black, NH	Amer. Ind. NH	Asian/ PI, NH	His- panic
Protect streams and other sources of clean water	86.9	84.1	93.3	78.2	84.2
Use and manage forest areas in ways that leave them natural in appearance	68.8	61.3	80.0	68.8	65.9
Emphasize planting and management of trees for an abundant timber supply	60.2	55.4	80.0	50.0	56.1
Provide access, facilities, and services for outdoor recreation	41.0	51.5	66.7	40.6	43.9
Provide access to raw materials for local industry and communities	19.0	23.8	13.3	25.0	39.0
4. Rising diversity matters w.r.t. forest values					

5. Changing age distribution of the South's population will likely change recreation demands

Age Group	Visiting Wilderness	Driving Off Road	Mountain Biking	Viewing Natural Scenery	Viewing Birds	Family Gatherings
16-34	36.5	27.3	24.1	55.4	22.7	78.1
35-54	33.8	18.0	18.2	62.9	35.6	77.5
55+	22.8	10.3	7.1	55.5	39.5	67.9
All Ages	31.6	19.0	17.0	58.2	32.3	74.9

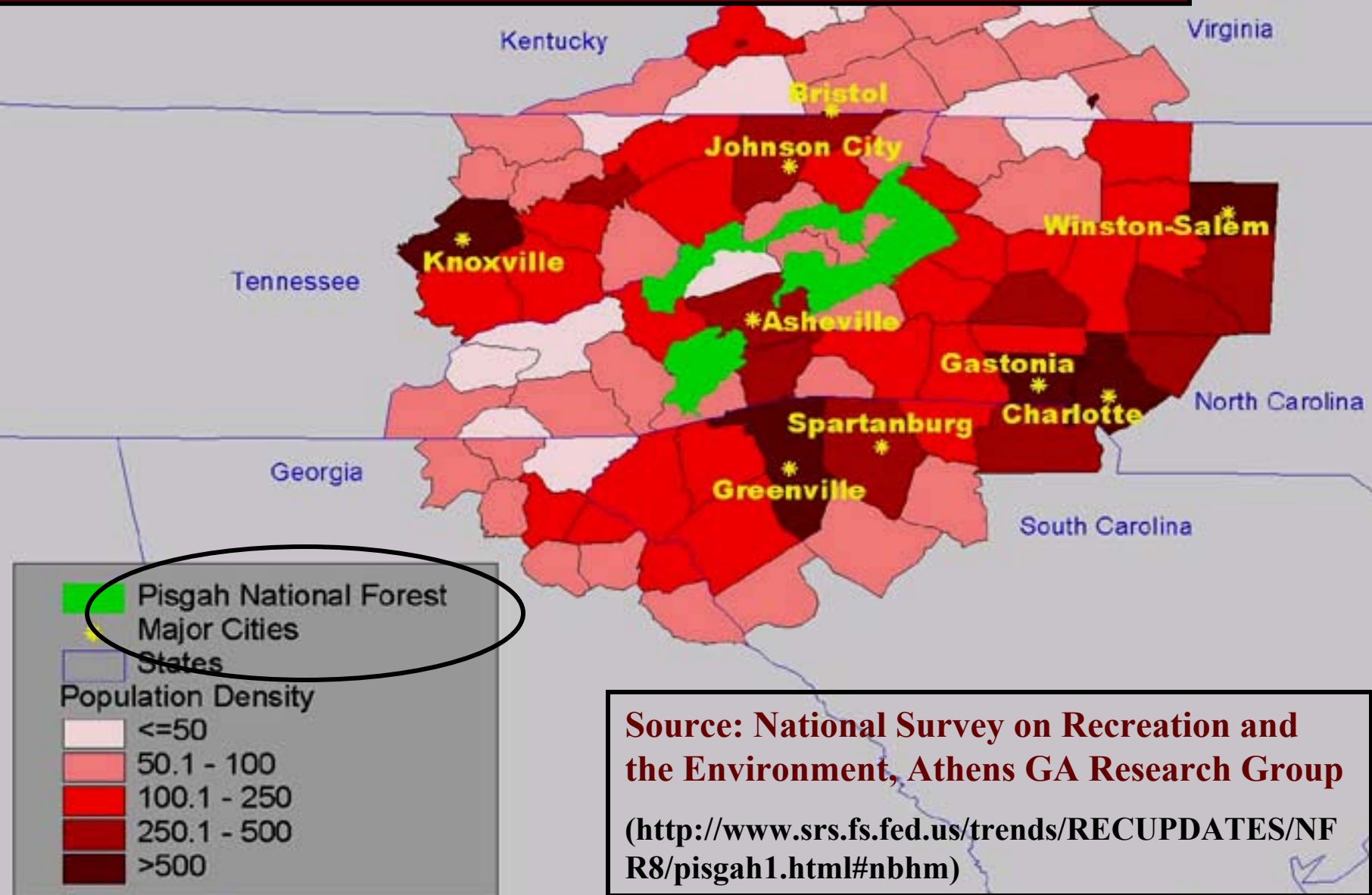
Source: National Survey on Recreation and the Environment, Athens, GA

Index of participants-to-total population for 6 outdoor activities by race and place of birth (national)

Group	Walking	Swimming Outdoors	Hiking	Driving Off-road	Downhill Skiing	Big Game Hunting
Race/Ethnicity						
White	1.02	1.15	1.03	1.13	1.20	1.28
Black	1.00	0.49	0.34	0.63	0.33	0.27
Amer. Indian	1.00	1.00	1.14	1.57	1.57	2.00
Asian/ PI	1.08	0.92	0.96	0.85	1.46	0.23
Hispanic	0.88	0.75	1.42	0.74	0.55	0.43
Place of Birth						
United States	1.02	1.04	0.93	1.05	1.05	1.07
Foreign Born	0.81	0.56	1.67	0.48	0.44	0.30

6. Rising diversity will likely change recreation demand

Rising population, aging, and growing diversity will mean changing local demand as well, e.g., the Pisgah



PISGAH National Forest Local Area--

Population age 16 and older by race and age

Population stratum	Age 16-34	%	Age 35-53	%	Age 55+	%	All Ages 16+
Hispanic males	72,311	61.5	37,467	31.8	7,867	6.7	117,645
Hispanic females	44,210	57.6	24,722	32.2	7,850	10.2	76,782
White males	658,139	31.3	793,508	37.8	648,608	30.9	2,100,255
White females	645,063	28.5	810,398	35.8	806,705	35.7	2,262,166
Black males	119,392	42.2	109,114	38.5	54,616	19.3	283,122
Black females	126,680	38.1	127,231	38.2	79,017	23.7	332,928
Native American males	3,906	38.7	3,930	38.9	2,267	22.4	10,103
Native American females	3,636	35.4	4,126	40.1	2,517	24.5	10,279
Asian & Pacific Islander males	15,011	46.0	13,978	38.8	1,957	15.2	30,946
Asian & Pacific Islander females	14,764	43.8	13,978	38.8	1,957	15.2	30,946
	1,703,112						

Source: National Survey on Recreation and the Environment, Athens GA Research Group
 (http://www.srs.fs.fed.us/trends/RECUPDATES/NF R8/pisgah1.html#nbhm)

7. Changing local populations at all NFs

PISGAH National Forest Local Area

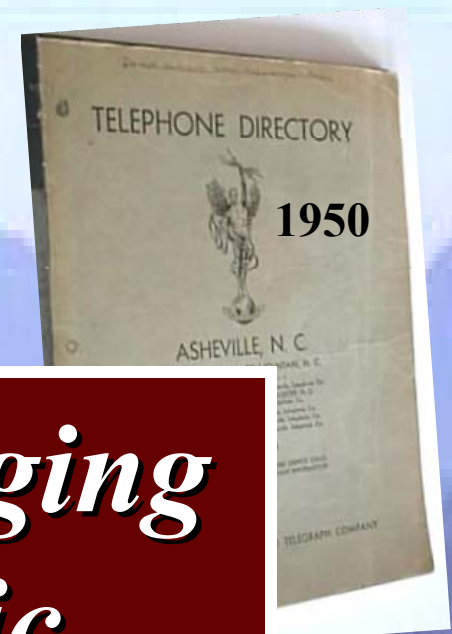
Percent (%) and number (#) of people age 16 and older participating in outdoor recreation
by age group

(Source: Recreation Research, Athens GA)

Viewing/Learning Activities: HISPANIC MALES

Activity	Age 16-34 %	Age 16-34 #	Age 35-54 %	Age 35-54 #	Age 55+ %	Age 55+ #	All Ages %	
View/photograph natural scenery	48.2	34,822	49.4	18,498	44.9	3,536	48.3	
Visit nature centers, etc.	63.1	45,629	62.2	23,320	46.7	3,673	61.7	
Sightseeing	35.5	25,677	40.4	15,137	38.1	2,997	37.2	
Visit historic sites	40.3	29,118	42.4	15,887	33.7	2,655	40.5	
View/photograph other wildlife	31.4	22,703	32.8	12,271	27.9	2,192	31.6	
View wildflowers, trees, etc.	26.1	18,880	34.7	12,999	36.9	2,902	29.6	
View/photograph birds	16.4	11,878	23.7	8,868	25.0	1,967	19.3	
Gather mushrooms, berries, etc.	28.3	20,466	22.4	8,381	16.9	1,332	25.7	
View/photograph fish	22.7	16,441	23.8	8,921	17.7	1,392	22.7	
Visit prehistoric/archeological sites	21.4	15,505	20.0	7,495	22.3	1,757	21.0	

2006 Chief's Review Asheville
NC, July 24-28



Changing Faces, Changing Places: Demographic Trends of the South



Ken Cordell, Southern Research Station, FS R&D

<http://www.oldtelephonebooks.com/phusncab.html>

Population of the 13 Southern States by Race---1990, 2000, & 2005

States	White (thousands)			Black (thousands)			American Indian & Alaskan Native (thousands)			Asian & Pacific Islander (thousands)			Hispanic (thousands)		
	1990	2000	2005	1990	2000	2005	1990	2000	2005	1990	2000	2005	1990	2000	2005
Alabama	2986	3262	3391	1024	1137	1183	17	18	18	22	34	40	25	37	42
Arkansas	1953	2186	2286	375	409	423	13	15	16	13	19	22	20	33	40
Florida	11029	12588	13332	1793	2326	2573	37	51	58	159	267	316	1595	2390	2845
Georgia	4653	5436	5713	1762	2279	2515	14	17	18	78	142	168	110	189	226
Kentucky	3404	3671	3760	265	287	298	6	6	6	18	29	33	22	32	38
Louisiana	2857	2895	2923	1302	1448	1521	19	20	20	42	62	72	94	119	138
Mississippi	1639	1774	1826	917	1012	1049	9	8	8	13	19	23	16	21	24
North Carolina	5052	5851	6160	1470	1738	1857	81	94	98	54	96	113	77	121	139
Oklahoma	2618	2759	2825	236	282	311	258	281	295	35	51	58	87	124	143
South Carolina	2422	2660	2781	1046	1156	1205	8	8	8	23	33	33	31	42	50
Tennessee	4066	4658	4887	782	929	999	10	12	14	32	57	66	33	57	67
Texas	14579	16920	17916	2057	2543	2797	73	95	107	336	562	667	4375	5875	6624
Virginia	4860	5295	5457	1174	1416	1526	16	19	19	164	267	320	162	269	322

Source: Census Bureau, Projected state populations by sex, race, and hispanic origin: 1995-2025, & Population estimates for states by race and hispanic origin: July 1, 1990.